bandwhich Bandwidth by process

START HERE

`sudo bandwhich`
Live bandwidth by process

`bandwhich -p`
Processes table only

Tab
Switch table layout

`bandwhich -t`
Show running totals

Space
Pause / resume

q
Quit

`bandwhich -i <if>`
Watch one interface

`bandwhich -n`
Skip DNS lookups

CONCEPTS

bandwhich shows which process, connection and remote host is using bandwidth right now. It needs packet capture and / proc access, so run it with sudo or grant capabilities once.

Packets sniffed on interface
↓ match
Socket port in /proc or lsof
↓ owner
Process name, PID, remote host
How traffic gets a name

Remote hostnames come from background reverse DNS and appear a moment after the IP. Use -n for raw IPs.

Process mapping uses /proc on Linux, lsof on macOS and the Windows API on Windows. Windows may need npcap installed.

CONCEPTS (cont.)

Upstream is in passive maintenance: fixes only, no new features.

IN THE TUI

Tab
Rotate which table comes first
Three tables: processes, connections, remote addresses. Small terminals show fewer.

Space
Pause or resume the display
Use it to read a busy screen; totals stop while paused.

q Quit

Ctrl + **C** Quit (interrupt)

Only q, Space and Tab are handled by the interface; there is no in-app help key, so check bandwhich --help for options.

The tables shrink to fit your window. Make the terminal taller to see more rows.

RUN

`sudo bandwhich`
Start monitoring all interfaces

`sudo env "PATH=$PATH" bandwhich`
Keep your PATH under sudo
Needed when installed under ~/.cargo/bin and sudo says command not found.

`bandwhich -i <if>`
Listen on one interface

`bandwhich -n`
Do not resolve IPs to hostnames

`bandwhich -s`
Show DNS queries

`bandwhich -d <ip>`
Use this DNS server for lookups

`bandwhich -r`
Machine-friendlier text output

`bandwhich -V`
Print version

`bandwhich -h`
Short help (--help for detail)

VIEWS AND UNITS

`bandwhich -p`
Show processes table only

`bandwhich -c`
Show connections table only

`bandwhich -a`
Show remote addresses table only

`bandwhich -t`
Show cumulative totals

`bandwhich -u bin-bytes`
Bytes, powers of 1024 (default)

`bandwhich -u bin-bits`
Bits, powers of 1024

`bandwhich -u si-bytes`
Bytes, powers of 1000

`bandwhich -u si-bits`
Bits, powers of 1000 (like ISP speeds)

`bandwhich -p -t`
Combine view and totals

PERMISSIONS

`sudo bandwhich`
Simplest: run as root

PERMISSIONS (cont.)

`sudo setcap cap_sys_ptrace, cap_dac_read_search, cap_net_raw, cap_net_admin+ep $(command -v bandwhich)`
Grant capabilities once (Linux)
Then run bandwhich as a normal user. Any user who can run it can see everyone's traffic, so avoid on shared machines.

`getcap $(command -v bandwhich)`
Check granted capabilities

`sudo setcap -r $(command -v bandwhich)`
Remove capabilities

Reinstalling or upgrading replaces the binary and drops its file capabilities. Run setcap again.

LOGGING AND DEBUG

`bandwhich -v`
More log output (repeat for more)

LOGGING AND DEBUG (cont.)

`bandwhich -q`
Less log output (repeat for less)

`bandwhich --log-to <file>`
Write debug log to a file

`bandwhich -vv --log-to <file>`
Verbose debug log to a file

RECIPES

Which program is eating my uplink

```
sudo bandwhich -i eth0 -p -n
```

Allow without sudo (Linux)

```
sudo setcap cap_sys_ptrace,
cap_dac_read_search,
cap_net_raw,cap_net_admin+ep $(
command -v bandwhich)
bandwhich
```

Watch DNS chatter

```
sudo bandwhich -s -c
```

Debug a failing start

```
sudo bandwhich -vv --log-to /
tmp/bw.log
# read /tmp/bw.log afterwards
```